

CLAIMS

1. A transmission belt (4) for a continuously variable transmission (1), comprising transverse elements (5) and an endless carrier (9) for keeping together the transverse elements (5), each transverse element (5) is provided with a rocking edge (12) showing a curvature for allowing neighbouring transverse elements (5) to mutually tilt about an substantially axially oriented contact line (7) over a tilting angle (α), so that a part of the belt (4) may pass along a longitudinally bent trajectory, characterised in that the curvature of the rocking edge (12) notionally displaces the contact line (7) in dependence on the tilting angle (α , β).
2. The transmission belt (4) according to claim 1, characterised in that the curvature of the rocking edge (12) is defined by at least one of a plurality of radii (R) exceeding 20 mm.
3. The transmission belt (4) according to claim 1 or 2, characterised in that the curvature of the rocking edge (12) is defined by a plurality of radii (R) that continuously increase in a radially inward direction.
4. The transmission belt (4) according to claim 1, 2 or 3, characterised in that the curvature of the rocking edge (12) is substantially elliptical.
5. The transmission belt (4) according to one of the claims 1-4, characterised in that the radius or radii (R) of the curvature of the rocking edge (12) lies or lie in the range between 20 mm and 180 mm, preferably between 30 mm and 150 mm, or around 40 mm.
6. The transmission belt (4) according to one of the previous claims, characterised in that each transverse element (5) is provided with a notch (10) longitudinally protruding from a principle plane (11) thereof, having a protruding height that is smaller than a maximum tilting clearance (C) in the belt's longitudinal direction at the location of the notch (11) between two mutually contacting elements (5).

7. The transmission belt (4) according to one of the previous claims, characterised in that in the radial direction of the transmission belt (4) the rocking edge (12) at least partly coincides with the endless carrier (9).

5 8. The transmission belt (4) according to claim 7, characterised in that the curvature of the rocking edge (12) is defined such that the contact line (7) between two neighbouring elements (5) is located radially inward from the endless carrier (9) at least in a part of the belt (4) that is curved in the longitudinal direction at a radius of curvature of approximately 5 cm.

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9. The transmission belt (4) according to claim 7 or 8, characterised in that the transverse element (5) is provided with an axial side face (8) for contact with a pulley (2, 3) of the transmission (1) and in that in the rocking edge (12) extends in the radially direction to approximately half a radial dimension of the axial side face (8).

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10. A transverse element (5) for application in the transmission belt (4) according to any of the preceding claims, characterised in that the transverse element (5) is manufactured by punching.

20 11. A continuously variable transmission (1) provided with the transmission belt (4) according to one of the claims 1-9.

12. The continuously variable transmission (1) according to claim 11 characterised in that the rocking edge (12) of the transverse elements (5) of the transmission belt (4) is defined such that during operation of the transmission (1) and for at least a part of the belt (4) the contact line (7) between two neighbouring elements (5) is located radially inward from the endless carrier (9).

25 13. The continuously variable transmission (1) according to claim 11 or 12, characterised in that the curvature of the rocking edge (12) is defined such that at a minimum radius of a bent trajectory part (R_{MIN}) of the belt (4) the displacement of the contact line (7) is at a maximum.

30 14. A vehicle provided with a transmission (1) according to claim 11, 12 or 13.

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